

REMARKS

Claims 2 and 11-17 have been rejected under 35 USC 103(a) as being unpatentable over Cook. Applicants respectfully traverse this ground of rejection and urge reconsideration in light of the following comments. As stated previously, the presented claimed invention is directed to a weather strip for a car which comprises a grip for attachment to a flange. The grip has a U-shape cross-section and comprises a holder part made of an olefinic rubber or a thermoplastic resin and an insert embedded in the holder part. The insert consists essentially of an olefinic thermoplastic elastomer and, optionally, a filler. A seal part is provided for performing a sealing function and the thermoplastic elastomer forming the insert has a Young's modulus in flexure of 2,000 - 5,000 MPa and the rubber or thermoplastic elastomer forming the holder part has a tensile strength of no greater than 2.5 MPa at 100% extension.

One of the advantages associated with the present invention is that it is easy to recycle the materials which form the weather strip. In order to achieve such an object, the weather strip of the present invention is comprised of a grip 2 having a holder part 3 made of an olefinic rubber or thermoplastic elastomer and the insert is made of an olefinic thermoplastic elastomer. Since the entire portion of the weather strip is made of materials having similar physical properties, it can easily be recycled and there is no need to remove the insert from the holder part 3 prior to recycling. As such, the recycling process involves less manpower and is more economical.

Another feature of the present invention is that the weather strip overcomes a problem in a weather strip which is made of a thermoplastic insert embedded in a thermoplastic holder part. Since the insert and the holder part have to be fused with each other by heat, the extension of the holder part 3 is restrained by the insert 4 when the weather strip is

bent to be attached to the corner section of a car body. The present inventors discovered that in order to overcome this problem, the tensile strength of the holder part containing an embedded insert having a Young's modulus in flexure of 2,000 - 5,000 MPa should be less than $\frac{1}{2}$ of that of the conventional material, that is 2.5 MPa or less, preferably 2.0 MPa at 100% extension. By providing the holder part with such a tensile strength, the weather strip can be easily bent and successfully attached to the corner sections of a car body. It is respectfully submitted that the prior art cited by the Examiner does not disclose the presently claimed invention.

The Cook reference discloses a method of forming a composite extrusion wherein a main body part 1 of the extrusion is first extruded from a thermosetting material and then heated so as to at least partially cure it. This main body portion is then passed at a high temperature through a further extruder where a thermoplastic material 8 is extruded onto one or more surfaces of the main body portion and then the subsequent composite extrusion is cooled and formed into its final shape.

As discussed in Column 3, lines 22-24, the main object of Cook is to provide a method of producing a weather strip which is less expensive. In order to obtain this object, the weather strip is mainly made of a thermosetting resin, which is less expensive than a thermoplastic resin, and partially made of a thermoplastic resin. As such, the holder 23, 53 70 is made of a thermosetting resin and the insert 25 is made of a thermoplastic resin.

As is known by the Examiner, a thermosetting resin is difficult to recycle since it does not melt once it is hardened, even when reheated. For these reasons, most of the materials forming the weather strip disclosed in Cook cannot be recycled. Moreover, if the thermoplastic resin formed in the insert 25 is recycled, it has to be removed from the holder, which requires additional manpower.

The weather strip shown in Cook has a different construction than that required by the present claims and has no disclosure with respect to the required physical properties of the thermoplastic elastomer forming the insert and the rubber or thermoplastic elastomer forming the holder part. These physical properties are critical in achieving the weather strip of the present invention. As such, Applicants respectfully submit that the presently claimed invention is clearly patentably distinguishable over the Cook reference.

Upon allowance of the claims directed to the elected invention, the Examiner has permission to cancel the non-elected claims without prejudice to the filing of a divisional application thereon. Reconsideration of the present application and the passing of it to issue respectfully solicited.

Respectfully submitted,


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